Claims

1.-6. (cancelled)

7. (currently amended) A double pipe structure in which an inner pipe for circulating fluid of high pressure is disposed in an outer pipe for circulating fluid of low pressure and the inner and the outer pipe are formed differently from each other and are joined to a joint member at respective end portions, wherein ~~two or more of the end portions~~

an end portion of the inner and an end portion the outer pipe ~~and the joint member~~ each define plastically deforming means for joining the joint member to the inner and outer pipes; and

the end portion of the inner pipe extending from the joint member is engaged with an insertion hole defined by the joint member by means of expanding the inner pipe at a side of the joint member.

8. (previously presented) A double pipe structure according to claim 7, wherein the joint member includes a port connected to another pipe, the plastically deforming means joins the inner pipe to the joint member by expanding an end portion of the inner pipe, and the outer pipe is joined to the joint member by contracting an end portion of the outer pipe.

9. (withdrawn) A double pipe structure according to claim 7, wherein the joint member includes a port connected to another pipe, the plastically deforming means

joins the inner pipe to the joint member by expanding an end portion of the inner pipe, and the joint member is joined to the outer pipe by contracting an end portion of the joint member.

10. (previously presented) A double pipe structure according to claim 7, wherein a seal member is interposed in a joint portion of the joint member and the inner pipe or in a joint portion of the joint member and the outer pipe.

11. (original) A double pipe structure according to claim 7, wherein rigidity of the inner pipe is lower than rigidity of the outer pipe.

12.-42. (cancelled)

43. (currently amended; withdrawn) A double pipe structure in which an inner pipe for circulating fluid of high pressure is disposed in an outer pipe for circulating fluid of low pressure and the inner and the outer pipe are formed differently from each other and are joined to the joint member at respective end portions, wherein

the inner and the outer pipe are joined to the joint member by plastically deforming means,

the joint member includes a cylindrical ~~male portion or a cylindrical female~~ portion formed at an end of the joint member and connected to the outer pipe, an insertion hole, into which the inner pipe is inserted, is formed step-like toward the other

end of the joint member inside the joint member, and a port for refrigerant of low pressure and a port for refrigerant of high pressure are connected to another pipe,

the inner pipe is arranged so as to protrude from an end portion of the outer pipe, inserted into the insertion hole through the cylindrical ~~male portion or the cylindrical female~~ portion, and joined to the step-like insertion hole at the other end of the joint member by means of drawing for expanding an end portion or by means of bead pressure-contact machining, and

the outer pipe is joined to the cylindrical [[male]] portion formed at the end of the joint member by means of drawing for contracting an end of the <u>outer</u> pipe ~~or the cylindrical female portion is joined to the outer pipe by means of drawing for contracting an end of the cylindrical female portion~~.

44. (withdrawn) A double pipe structure according to claim 43, wherein a seal member is interposed in a joint portion of the joint member and the inner pipe or in a joint portion of the joint member and the outer pipe.

45. (withdrawn) A double pipe structure according to claim 43, wherein rigidity of the inner pipe is lower than rigidity of the outer pipe.

46. (cancelled)

47. (new) A double pipe structure comprising:

a double pipe in which an inner pipe is laid in an outer pipe, said inner pipe and said outer pipe being formed differently from each other; and

a joint member jointing to an end portion of said inner pipe and an end portion of said outer pipe; wherein;

said inner pipe is jointed to said joint member at a state which said inner pipe is arranged eccentric with respect to said outer pipe.

48. (new) A double pipe structure according to the new claim 47, wherein said joint member has a port and an extending passage extending from said outer pipe and communicating with the port, and wherein said inner pipe is arranged eccentric with respect to said outer pipe on an opposed side to the port.

49. (new) A double pipe structure according to the new claim 47, wherein a bent portion is formed in a portion of said double pipe in the longitudinal direction.

50. (new) A double pipe structure according to the new claim 47, wherein fluid of high pressure circulates in said inner pipe and fluid of low pressure circulates.

51. (new) A double pipe structure comprising:

a double pipe in which an inner pipe is laid in an outer pipe, said inner pipe and said outer pipe being formed differently from each other, and

a joint member jointing to an end portion of said inner pipe and an end portion of said outer pipe; wherein

said joint member includes a body, a cylindrical male portion protruding from the body and in which said outer pipe is connected, an extending passage extending from said outer pipe and communicating with a hollow portion of the cylindrical male portion, and a groove, the diameter of which is smaller than the outer diameter of the cylindrical male portion, formed on the cylindrical male portion, and wherein

said outer pipe is externally engaged into the cylindrical male portion of said joint member, the forward end portion of said outer pipe is plastically deformed by means of drawing to be bent into the groove of the cylindrical male portion so that said outer pipe is jointed to the cylindrical male portion of said joint member.

52. (new) A double pipe structure comprising:

a double pipe in which an inner pipe is laid in an outer pipe, said inner pipe and said outer pipe being formed differently from each other, and

a joint member jointing to an end portion of said inner pipe and an end portion of said outer pipe, wherein

said joint member includes a body, a cylindrical female portion protruding from the body and in which said outer pipe is connected, and an extending passage extending from said outer pipe and communicating with a hollow portion of the cylindrical female portion, and

said outer pipe has a groove, and wherein

said outer pipe is internally engaged into the cylindrical female portion of said joint member, the forward end portion of the cylindrical female portion is plastically deformed by means of drawing to be bent into the groove of said outer pipe so that said outer pipe is jointed to the cylindrical female portion of said joint member.